Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 17 of the	)	
Cable Television Consumer Protection	)	ET Docket No. 93-7
and Competition Act of 1992	)	
	)	
Compatibility Between Cable Systems	)	
and Consumer Electronics Equipment	)	

To: The Commission

PETITION FOR RECONSIDERATION

CABLEVISION SYSTEMS CORPORATION

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Cablevision Systems Corporation ("Cablevision"), by its attorneys, hereby petitions for reconsideration of the First Report and Order in the above-captioned proceeding.[1/]

INTRODUCTION AND SUMMARY

Congress enacted Section 624A of the 1992 Cable Act[2/] to promote compatibility between cable systems and consumer electronics equipment, such as video cassette recorders and advanced television receivers, purchased by cable subscribers.[3/] The Commission's equipment compatibility rules, while addressing this issue, move beyond compatibility and attempt to create

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[1/] Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992, Compatibility Between Cable Systems and Consumer Electronics Equipment, ET Docket No. 93-7 (rel. May 4, 1994)("Equipment Compatibility Order").

[2/] 47 U.S.C. § 544A.

[3/] See H. Rep. No. 628, 102d Cong., 2d Sess. 107-8 (1992).

a competitive marketplace for set-top devices and other consumer equipment used to receive cable service. In pursuit of the latter objective, however, the Commission has adopted rules that could inhibit operators from upgrading their network infrastructure and thwart the deployment of new technology. Cablevision, for instance, may be forced to delay major upgrades of systems on Long Island and in Connecticut because no "dual code" set-top devices are currently available in the marketplace.

The Commission could not have intended for its equipment compatibility rules to deny subscribers access to advanced features and functions. Unless modified, however, the Commission's decision to bar operators from changing the infrared codes in set-top devices that operate remote controls will produce that very result.[4/] Changing these codes is often a necessary predicate to upgrading a cable system or deploying new services. In order to prevent its equipment compatibility rules from impeding such advances, the Commission must reconsider its decision to limit the ability of operators to change the infrared codes in set-top devices.

The Commission's rules also must not permit the inevitable obsolescence of cable equipment purchased by subscribers in the marketplace to hinder the ability of operators to deploy new technologies and offer new services. Operators should be required to make a good-faith effort to configure new technologies and new services to be compatible with subscriber-owned equipment.[5/] However, they should not be forced to configure new technologies and new services to be compatible with every piece of equipment that subscribers might acquire over time. Accordingly, the Commission's consumer education requirements should be expanded to

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[4/] Equipment Compatibility Order at ¶ 63.

[5/] See id. at ¶ 48.

ensure that consumers who purchase cable equipment do so with full knowledge that such equipment could become obsolete.

I. THE COMMISSION SHOULD REVISE ITS LIMITATION ON CHANGING REMOTE CODES

In an effort to forestall actions that would "prevent the use of subscriber-owned remote controls,"[6/] the Commission barred operators from altering "the infrared codes used to operate the remote control capabilities of the customer premises equipment they employ in providing service to subscribers."[7/] This rule is doubly flawed. First, it substantially underestimates the importance of changing remote codes in the context of converter upgrades. Second, it completely overlooks the technical, financial and practical limits inherent in providing subscribers with advanced converters that utilize more than one set of infrared codes.

As a threshold matter, Cablevision agrees with the Commission that operators should not be permitted to engage in practices such as disabling subscriber-owned remotes by "turning off the eyes" of converter boxes. The Commission's rules go well beyond deterring such conduct, however, and threaten to impede operators seeking to upgrade their network infrastructure.

Set-top devices frequently constitute the crucial means by which advances in overall system architecture and engineering translate into tangible new features and services for subscriber homes. The Commission apparently envisions that most operators seeking to upgrade set-top devices to provide subscribers with new features and functions "can simply choose

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[6/] Equipment Compatibility Order at ¶ 63.

[7/] 47 C.F.R. § 76.630(c).

replacement equipment that operates with the same infrared codes as their existing equipment."[8/] In most upgrades involving set-top devices, however, operators are replacing converters that are anywhere from six to ten years old. The internal design and operational codes utilized in these new devices are more sophisticated and substantially different from that of their older predecessors. Changing the infrared codes used to operate remotes can be an essential precondition to providing subscribers with set-top devices offering the latest features and functions, such as enhanced tuning range, improved signal performance, TV/VCR compatibility, internal bypass switches, messaging, and VCR programming. While the Commission aims to promote greater subscriber access to these features and functions, its blanket prohibition on changing remote codes will have precisely the opposite effect.

In apparent recognition of the importance of changing infrared codes in the context of converter upgrades, the Commission's rules also state that operators may "use new equipment that includes additional infrared codes for new remote control functions that were not included in existing models of customer premises equipment."[9/] This provision, however, carries little practical benefit because any new infrared codes needed to operate upgraded converters must be in addition to -- and not a substitute for -- the old codes used by the operator.[10/]

The requirement that all new terminal devices utilize preexisting as well as new infrared codes will severely hamstring operators seeking to upgrade their infrastructure or deploy new

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[8/] Equipment Compatibility Order at ¶ 63. The Commission appears to assume, incorrectly, that all set-top devices currently in use are compatible with all remotes. In fact, remotes that are compatible with some of General Instrument's more advanced devices will not work with some of Scientific Atlanta's currently available devices.

[9/] 47 C.F.R. § 76.630(c).

[10/] Equipment Compatibility Order at ¶ 63.

equipment. The infrared codes of a set-top box are an essential component of the internal operational language that administers the converter and communicates with the operator's head-end. A terminal device that offers advanced features and functions utilizes a more sophisticated internal operational language that often requires a new infrared code. Mandating the continued inclusion of the circuity for the "old" operational language in advanced set-top devices will hinder infrastructure upgrades and deny subscribers access to advanced services.

For example, Cablevision currently is upgrading its Long Island system, a process initiated prior to the Commission's rulemaking in this docket. The upgraded system utilizes a new set-top device that provides enhanced access control and security, greater tuning range, and new capabilities such as internal bypass switches, TV/VCR compatibility, improved parental control, and other features. Cablevision selected this set-top device, which will effectuate this upgrade in the most cost-effective and technically efficient manner, after surveying the range of set-top devices available on the market. The infrared codes in that converter differ from those which had been utilized previously on the system.

The short-term effect of the Commission's new equipment compatibility rules is to cast doubt on whether Cablevision can continue with this system upgrade, since it involves changing remote codes and hinges on the continued roll-out of new converter boxes that do not contain the old codes. If the Commission's rules interrupt this upgrade, then a substantial portion of Cablevision's Long Island subscribers will be indefinitely denied access to advanced features their neighbors can now enjoy.

More fundamentally, however, the Long Island upgrade illustrates how adoption of the Commission's rule regarding remote code changes would artificially limit an operator's choice

of equipment vendors. Currently, there are no converters on the market that can utilize both the old infrared codes and the new codes needed to deliver the advanced functionalities and capabilities that Cablevision seeks to offer its subscribers.[11/] If the Commission's rule had been in effect when Cablevision initiated its Long Island upgrade, the company either would have been forced to purchase new set-top devices that run on the old codes but lack the full complement of advanced capabilities or postpone the upgrade. Indeed, **no set-top devices meeting the Commission's remote code rule will be available on July 31, 1994, when the rule takes effect.** Operators planning a roll-out of new equipment will presumably be forced to reassess or delay their plans if the upgrade involves a change in remote codes.[12/] The Commission surely could not have intended its equipment compatibility rules to produce such a result.

The Commission suggests that it is relatively easy and cost-effective to design new converters that can utilize both the old codes and the new codes that provide advanced functionalities and capabilities.[13/] All converters, however, have a finite amount of memory, and the new features and capabilities provided by the latest converters are more complex and require more memory. Accordingly, in the design and deployment of cost-effective converters that offer new capabilities but still have only a finite amount of memory, there is inevitably some

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[11/] Indeed, Cablevision would not have changed the codes if the "old" codes and internal operational language had been capable of providing this enhanced functionality.

[12/] Cablevision, for example, is in the process of selecting new equipment to use with a rebuilt system in Connecticut.

[13/] See Equipment Compatibility Order at ¶ 63.

trade-off between functionality and compatibility.[14/] This is illustrated by the fact that today some newer converters made by equipment manufacturers are not even compatible with the old infrared codes utilized by that same manufacturer -- let alone with those utilized by other existing equipment vendors and any new entrants into the market.

The compatibility problems that already exist today will only be exacerbated by the infusion of new converters and remotes -- of varying degrees of cost, quality and sophistication -- into the market for subscriber-owned equipment which the Commission seeks to promote. Not all of these devices will be compatible with one another. In addition, other factors such as subscriber relocation also will affect an operator's ability to comply with the remote code compatibility requirement. Any operator contemplating an upgrade in such an environment might have to confront the technical and economic feasibility of providing converters that utilize as many as four or five different infrared codes.[15/]

Even if the cost, technical, and operational barriers to designing converter boxes that run on multiple codes could be surmounted, the benefits to subscribers are minimal. Subscribers with remotes that utilize the old remote coding scheme will not have access to the new features

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[14/] Compatibility problems are not just a matter of cost and limited memory. For example, in some instances, the improved security and access control features that run on new codes utilized by some state-of-the-art converters simply cannot be designed to interface with the old infrared codes. Thus, operators will either have to forego enhanced security and access control or duplicate channel offerings to ensure continued access to programming for subscribers whose remotes run on the old codes.

[15/] The technical design complexities and economic burdens confronting an operator in such circumstances would be multiplied by the requirement that operators deploying new set-top devices also would be required to make a good-faith effort to ensure that such devices are compatible with the supplemental equipment that the new rules require operators to provide subscribers. 47 C.F.R. § 76.630(d).

and functions that are only enabled by the new codes. Instead, they will have to obtain new remotes that run on the new codes. Thus, the considerable burdens imposed by the remote code provision will not yield the benefit the Commission is seeking to promote.[16/]

The practical impact of the Commission's blanket prohibition on changing infrared codes will be to impose a technological straitjacket on operators seeking to upgrade their systems. The infrared codes that activate the installed base of remotes will, of necessity, become the lodestar for decisions about upgrades and new equipment roll-outs. This is akin to requiring that all decisions about advances in the next generation of applications software programs for computers be wholly contingent upon compatibility with the current installed base of operations hardware.

The Commission should modify its ban on changing infrared codes and instead employ a "good faith" standard similar to that used in the context of providing supplemental equipment.[17/] Operators should not be permitted to purposefully configure their equipment to disable subscriber-owned remotes. Moreover, operators should be required to make a good-faith effort to utilize infrared codes that are compatible with remote control equipment used by

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[16/] While the Commission's rule would preserve bare usability of existing remotes, the value of those remotes to subscribers would substantially diminish as operators deployed set-top devices offering functionalities that could not be accessed by those remotes. In such an environment, customer confusion and dissatisfaction is likely to develop.

[17/] See Equipment Compatibility Order at ¶ 48. The Commission's rules require operators to "make a good faith effort to provide subscribers with the amount and types of special equipment needed to resolve their individual compatibility problems." 47 C.F.R. § 76.630(d).

subscribers. Operators should not, however, be sanctioned for changing remote codes in order to roll-out new equipment or effectuate advances in system engineering.[18/]

II. THE COMMISSION'S CONSUMER EDUCATION REQUIREMENTS SHOULD ENSURE THAT SUBSCRIBERS PURCHASING CABLE EQUIPMENT ARE INFORMED OF THE POTENTIAL OBSOLESCENCE OF SUCH EQUIPMENT.

The Commission adopted a consumer information program designed to assist cable subscribers in understanding equipment compatibility problems they may encounter.[19/] In order to minimize subscriber confusion and design a policy framework that does not inhibit technological advancement, the Commission should expand its consumer education requirements to ensure that subscribers are made aware of the potential obsolescence of any cable equipment they may purchase.

The threat of obsolescence looms over virtually every facet of the market for consumer electronics equipment. Technological advances in consumer equipment that are taken for granted today -- such as the compact disc player, sixteen-bit video game cartridges, faster and more sophisticated software programs -- all emerged only after displacing (over a relatively short

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[18/] In apparent recognition that remotes may not work with all set-top devices, the Commission's rules elsewhere provide that operators may "wish to advise subscribers that subscriber-owned remote control units may not be functional if the cable system changes terminal devices." 47 C.F.R. § 76.630(e)(iii). The flawed remote code requirement is premised on precisely the opposite reasoning. See Equipment Compatibility Order at ¶ 72 (due to the ban on changing remote codes, "subscribers will not need to be cautioned about loss of use of their remote controls" in cases where the operator changes set-top boxes). For the reasons set forth in the text, the Commission should abandon its inflexible remote code rule in favor of a "good faith" standard coupled with an expansion of its consumer education requirements. See infra at Part II.

[19/] See 47 C.F.R. § 76.630(e).

period of time) incumbent equipment products with a large installed base. It is highly unlikely that any of these technological advances in consumer equipment could have been achieved so readily and successfully had their designers been forced to configure the advanced product to be compatible with the outmoded equipment it was designed to replace.

In the context of consumer electronics equipment for cable subscribers, it is axiomatic that not everyone will be purchasing equipment that will contain -- or be compatible with -- the most advanced features and functions available to subscribers. In every facet of the consumer electronics equipment market, there are trade-offs between price and product sophistication. The market for cable consumer electronics equipment will be no different. Electronics equipment purchased today by cable subscribers may subsequently become obsolete due to advances in system engineering and design that enable operators to provide subscribers with additional offerings and higher-quality service in a more cost-effective manner.

The Commission's rules should not limit operators and equipment-makers to offering only those new products and services that are compatible with the old products and services that they are designed to improve upon or replace. Instead, those rules should reflect the fact that there are a host of legitimate reasons why equipment purchased by cable subscribers may subsequently become incompatible with the equipment used to operate their cable system.[20/]

[20/] The converse may also be true. Some sophisticated equipment purchased by consumers may not be fully operable on some systems because of limitations in the network infrastructure. As Congress and the Commission recognized, advances in consumer electronics should not force operators into making premature and costly system upgrades or reconfigurations. See 47 U.S.C. § 544A(c)(2)(B); 47 C.F.R. § 76.630(e)(2)(i)-(ii)(requiring operators to inform subscribers that some advanced features of television sets, VCRs, and remotes may not be fully operable).

Accordingly, the Commission should expand its consumer education requirements to ensure that purchasers of cable electronics equipment are informed that the products which they buy may become outmoded or obsolete due to technological advances. In this way, consumers of cable equipment will be on notice that they face the same risk of obsolescence encountered by purchasers of audio components, software, video games, and other consumer electronics equipment.

CONCLUSION

For the foregoing reasons, the Commission should reconsider and modify its equipment compatibility rules as described above.

Respectfully submitted,

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